

**PLC Powered and Controlled Lubrication**



The MEMOLUB® 24V-PLCd model lubricator is especially designed for PLC-controlled machinery (or mobile equipment) where a 24VDC power supply is available. It is for lubricating a wide variety of robots, conveyors ideal, and OEM applications. The MEMOLUB® 24V-PLCd can be direct-mounted for single-point applications, or remote-mounted using pipe or flexible tubing. In addition, lubrication from 2 to 12 lube points is possible with a MEMOLUB® Multi-Point Lubrication System.

The MEMOLUB® 24V-PLCd lubricator has a unique design utilizing a Power-Through Memo which contains the electrical connections needed to power the unit.

This gives the user the ability to quickly remove the lubricator for fast lubricant cartridge change-out while avoiding contact with the electrical connections.

A 1 meter extension cable on the Power-Through Memo is connected to a PLC-controlled power supply. The PLC program controls the frequency of lubrication output cycles, which may be based upon elapsed clock hours, machine cycles, a count of parts produced, or other desired criteria.

The MEMOLUB® 24VDC-PLC is available in three sizes: Standard 120cc, Mega 240cc, and Giga 480cc. Like the HPS model, it is reusable with available replacement lube cartridges. These cartridges are carefully filled at the factory using a precise centrifuging process that eliminates air pockets and contamination. Cartridge change-out normally takes less than 60 seconds!

MEMOLUB® is a valuable alternative to time-consuming and costly manual lubrication.

**Specifications & Operating Characteristics:**

Voltage :	24VDC
Amps :	0.5A max
Stroke duration	4 seconds
Timing in between 2 strokes :	20 seconds
Maximum strokes in a row :	10 (lubrication cycle)
Timing in between 2 lubrication cycles :	1 hour
Quantity of lubricant per stroke :	0.635cc
Cable :	Bleu = + , brown = - , polarity protection
Short-Circuit :	Integrated protection in MEMOLUB® PLCd



The Power-Through

Working principle : MEMOLUB® PLCd is working as long as 24VDC current is supplied. Unit is programmed to make one stroke and then to go in sleep mode for 20 seconds before the next stroke. After 10 strokes, the unit will stop until the current has been shut off.

### Lubricator Installation Instructions



1. Install the Power-Through Memo fitting, either direct or remote mounted.



2. Screw the MEMOLUB® 24VDC-PLC on the Power-Through Memo fitting.



4. The MEMOLUB® 24VDC-PLC must be connected to a PLC for its power supply. The PLC determines the frequency of output cycles. *(PLC Not Included)*

### Lubricant Cartridge Change Out Instructions



1. To open, place the lubricator upright on flat surface. Press firmly and turn locking ring counter-clockwise while holding the ribbed



2. Carefully squeeze air out of the cartridge until grease begins to emerge from the outlet.



3. Place the cartridge on the inlet of the lower housing.

***Grease Cartridges Only.***



2. Hold the cartridge with the outlet facing up. Carefully remove the cartridge plug. Turn the lower housing over and gently place it on the outlet of the cartridge

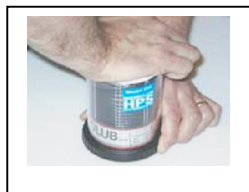


3. While holding the cartridge and lower housing together, flip the assembly over and hold the cartridge in place.

***Oil Cartridges Only.***



4. Place the clear housing assembly over the lubricant cartridge and lower housing.



5. Holding the locking ring by its ribbed surface, turn it clockwise until it clicks into the locked position.



6. Screw the MEMOLUB® HPS lubricator onto the Power-Through MEMO.



Note: If necessary, prime the MEMOLUB® HPS with a hand grease gun (grease application only).

### SAFETY PRECAUTIONS

\* **Warning:** Lower housing contains a loaded spring. **Do not open.**

\* Use only factory pre-filled cartridges

**PLC programming for MEMOLUB<sup>®</sup> PLCD single point**

Working principle : MEMOLUB<sup>®</sup> PLCD/2 is working as long as 24VDC current is supplied. Unit is programmed to make one stroke and then to go in sleep mode for 20 seconds before the next stroke. After 10 strokes, the unit will stop until the current has been shut off.

Programming PLC for 1 lubrication stroke : Supply 24VDC to MEMOLUB<sup>®</sup> PLCD/2 for at least 5 seconds and maximum 15 seconds. For each stroke more, supply 24VDC for 25 seconds more to the first stroke. MEMOLUB<sup>®</sup> PLCD/2 will go in sleep mode after 10 strokes in a row. To get MEMOLUB<sup>®</sup> PLCD/2 out of sleep mode, shut off current supply and start MEMOLUB<sup>®</sup> again.

**PLC programming for MEMOLUB<sup>®</sup> PLCD with distributor block and limit switch**

Working Principle : PLC supplies current to the MEMOLUB<sup>®</sup>, the Limit Switch mounted on the Distributor Block gives the signal that a full lubrication cycle has been achieved. (each outlet has received its amount of lubricant) and PLC stops MEMOLUB<sup>®</sup> pumping

**Programming PLC for 1 lubrication cycle**

Supply current to MEMOLUB<sup>®</sup> up that Limit Switch has been triggered. If after 2 minutes Limit Switch has not been triggered, stop MEMOLUB<sup>®</sup> and start operation again on the next programmed cycle. If after second attempt Limit Switch has still not been triggered means that there is a lubrication problem (empty refill, line blocked, MEMOLUB<sup>®</sup>, distributor block or limit switch malfunction,...) and alarm should be given to the operator.